

**WHAT IS CLAIMED IS:**

5           1.       A safety shield comprising:

          a piercing member having a distal end and defining a longitudinal axis; and

          a clip defining a first cavity dimensioned for movement of the piercing member  
therethrough and being oriented in an axis transverse to the longitudinal axis of the piercing  
10   member, the first cavity being movable between a movable orientation and a binding  
orientation;

          the clip including a first leg that defines a second cavity dimensioned for movement  
of the piercing member therethrough and a distal part being configured to engage a medical  
device, the clip further including a second leg having a bearing surface that engages the  
15   piercing member;

          wherein the first leg and the second leg are biased for convergent movement such  
that the first cavity is disposed in the binding orientation and the distal part of the first leg  
disengages the medical device.

          2.       A safety shield as recited in claim 1, wherein the first cavity is rotatable  
20   relative to the longitudinal axis of the piercing member.

          3.       A safety shield as recited in claim 1, wherein the first cavity defines a  
binding surface that engages the piercing member in the binding orientation.

          4.       A safety shield as recited in claim 1, wherein the clip further includes a plate  
that defines the first cavity and is oriented substantially perpendicular to the legs.

5. A safety shield as recited in claim 1, wherein the first leg has a proximal part that is oriented substantially perpendicular to the transverse axis of the first cavity in the movable orientation.

6. A safety shield as recited in claim 1, wherein the second leg has a proximal part that is oriented substantially perpendicular to the transverse axis of the first cavity in the movable orientation.

7. A safety shield as recited in claim 1, wherein the distal part of the first leg includes a transverse portion that defines the second cavity.

8. A safety shield as recited in claim 1, wherein the distal part of the first leg includes an arm configured to releasably retain the medical device.

9. A safety shield as recited in claim 1, wherein the clip is disposed within a housing.

10. A safety shield as recited in claim 9, wherein the housing is movable between a retracted position whereby the distal end of the piercing member is exposed and an extended position whereby the housing encloses the distal end of the piercing member.

11. A safety shield as recited in claim 9, wherein the clip releasably retains the medical device with the housing.

12. A safety shield as recited in claim 9, wherein the housing is substantially transparent.

13. A safety shield as recited in claim 9, wherein the housing includes a flash chamber.

14. A safety shield as recited in claim 1, wherein the medical device includes a catheter.

15. A safety shield comprising:

5 a piercing member having a proximal end, a distal end and defining a longitudinal axis;

a housing having an outer surface; and

a clip including a plate oriented in an axis transverse to the longitudinal axis of the piercing member and defining a cavity dimensioned for movement of the piercing member therethrough, the cavity of the plate being rotatable, relative to the longitudinal axis of the  
10 piercing member, between a sliding orientation and a binding orientation whereby a surface of the plate that defines the cavity engages the piercing member to prevent slidable movement thereof,

the clip including a first leg extending from the plate and having a proximal part and a distal part, the distal part defining a cavity dimensioned for movement of the piercing  
15 member therethrough and being configured to engage a medical device, the clip including a second leg that extends from the plate and has a proximal part and a distal part, the distal part of the second leg including a bearing surface that engages the piercing member;

wherein the legs are resiliently biased for convergent movement such that the first cavity is disposed in the binding orientation and the distal part of the first leg disengages the  
20 medical device.

16. A safety shield as recited in claim 15, wherein the piercing member is disposed within the cavity of the first leg to prevent convergent movement of the legs.

17. A safety shield as recited in claim 15, wherein the housing is movable between an retracted position whereby the distal end of the piercing member is exposed and an extended position whereby the distal end of the piercing member is enclosed within the housing.

5 18. A safety shield as recited in claim 15, wherein the distal part of the first leg includes an arm being configured to releasably retain the medical device with the outer surface of the housing.

19. A safety shield as recited in claim 15, wherein the bearing surface of the second leg engages the piercing member in the binding orientation to prevent movement of  
10 the piercing member.

20. A safety needle shield apparatus comprising:

a needle having a proximal end, a distal end and defining a longitudinal axis;

a housing having an outer surface and being movable between an retracted position whereby the distal end of the needle is exposed and an extended position whereby the distal  
15 end of the piercing member is enclosed within the housing, the housing being substantially transparent and defining a flash chamber; and

a clip including a plate oriented in an axis transverse to the longitudinal axis of the needle and defining a slot dimensioned for movement of the needle therethrough, the cavity of the plate being rotatable, relative to the longitudinal axis of the needle, between a sliding  
20 orientation and a binding orientation whereby a surface of the plate that defines the cavity engages the needle to prevent slidable movement thereof,

the clip including a first leg extending from the plate and having a proximal part and a distal part, the distal part defining a cavity dimensioned for movement of the needle therethrough such that disposal of the needle in the cavity of the distal part prevents transverse movement of the first leg, the distal part of the first leg including an arm configured to releasably retain a catheter hub with the outer surface of the housing,

the clip further including a second leg that extends from the plate and has a proximal part and a distal part, the distal part of the second leg including a bearing surface that engages the needle,

wherein the legs are resiliently biased for convergent movement such that the first cavity is disposed in the binding orientation and the arm of the first leg releases the catheter hub, the bearing surface of the second leg engages the needle in the binding orientation to prevent movement of the needle.

21. A safety needle shield as recited in claim 15, wherein the clip further includes a transition portion that connects the plate with the first leg, the transition portion being configured to engage an inner surface of the housing to facilitate rotation of the cavity of the plate.

22. A safety needle shield as recited in claim 21, wherein the transition portion engages the inner surface of the housing to facilitate gripping engagement of the cavity of the plate with the needle.

23. A safety needle shield as recited in claim 1, wherein the first cavity includes a slot.

24. A safety needle shield as recited in claim 1, wherein the cavity of the plate includes a slot configuration.

25. A safety needle shield as recited in claim 4, wherein the plate has a greater relative rigidity than the legs.

5 26. A safety needle shield comprising:

a needle having a distal end and defining a longitudinal axis; and

a clip defining a first cavity dimensioned for movement of the needle therethrough, oriented in an axis transverse to the longitudinal axis of the needle, the first cavity being movable between a movable orientation and a binding orientation;

10 the clip including a first leg that defines a second cavity dimensioned for movement of the needle therethrough and a distal part being configured to engage a medical device, the clip further including a second leg having a bearing surface that engages the needle, the distal part of the first leg releasably engaging the second leg in the movable orientation;

15 wherein the first leg and the second leg are biased for convergent movement such that the first cavity is disposed in the binding orientation and the distal part of the first leg disengages from the second leg and the medical device.

27. A medical clip adapted for use with a piercing member having a distal end and defining a longitudinal axis, the clip comprising:

20 a first cavity dimensioned for movement of the piercing member therethrough and being oriented in an axis transverse to the longitudinal axis of the piercing member, the first cavity being rotatable, relative to the longitudinal axis of the piercing member, between a movable orientation and a binding orientation;

a first leg that defines a distal part extending therefrom and a second cavity, the second cavity being disposed distal to the first cavity and dimensioned for movement of the piercing member therethrough; and

a second leg having a surface configured to engage the piercing member,

5 wherein the first leg and the second leg are, relative to the first and second legs, biased for convergent movement such that the first cavity is disposed in the binding orientation upon movement of the piercing member out of the second cavity.

28. A medical clip as recited in claim 27, wherein the clip further includes a plate having the first leg and the second leg extending therefrom, the plate defining the first  
10 cavity.

29. A medical clip as recited in claim 27, wherein the first cavity defines a binding surface that engages the piercing member in the binding orientation to prevent movement of the piercing member.

30. A medical clip as recited in claim 29, wherein the binding surface has a  
15 flared configuration that facilitates movement of the piercing member in the movable orientation and engages the piercing member to prevent movement of the piercing member in the binding orientation.

31. A medical clip as recited in claim 27, wherein the distal part of the first leg includes a transverse portion that defines the second cavity.

20 32. A medical clip as recited in claim 27, wherein the distal part includes a first transverse portion and a second transverse portion extending therefrom, the second cavity

including separate aligned apertures defined within the first transverse portion and the second transverse portion.

33. A medical clip as recited in claim 27, wherein the second leg defines a cavity that is rotatable, relative to the longitudinal axis of the piercing member, between a movable orientation and a binding orientation, the cavity of the second leg defining a binding surface that engages the piercing member in the binding orientation to prevent movement of the piercing member.

34. A medical clip as recited in claim 33, wherein the binding surface of the cavity of the second leg has a flared configuration that facilitates movement of the piercing member in the movable orientation and engages the piercing member to prevent movement of the piercing member in the binding orientation.

35. A medical clip as recited in claim 33, wherein a distal portion of the second leg releasably engages a catch of the first leg to facilitate movement of the piercing member in the movable orientation.

36. A medical clip as recited in claim 33, wherein a distal portion of the second leg has a catch that releasably engages and is disposed within a channel defined within the first leg, in the movable orientation.

37. A medical clip as recited in claim 27, wherein the distal part includes a first transverse portion and a second transverse portion extending therefrom, the second transverse portion defining a third cavity that is aligned with the second cavity and dimensioned for movement of the piercing member therethrough.



38. A safety shield as recited in claim 1, wherein the second leg defines a network of biasing elements configured to bias the clip.

39. A medical clip as recited in claim 38, wherein the biasing elements of the network define channels therebetween and are connected to form a continuous spring element.

40. A safety shield comprising:

a piercing member having a distal end and defining a longitudinal axis; and

a clip defining a first cavity dimensioned for movement of the piercing member therethrough and being oriented in an axis transverse to the longitudinal axis of the piercing member, the first cavity being movable between a movable orientation and a binding orientation;

the clip including a first leg that defines a second cavity dimensioned for movement of the piercing member therethrough and a distal part being configured to engage a medical device, the clip further including a second leg having a network of biasing elements configured to bias the clip and a bearing surface that engages the piercing member, the biasing elements of the network defining channels therebetween and being connected to form a continuous spring element;

wherein the first leg and the second leg are biased for convergent movement such that the first cavity is disposed in the binding orientation and the distal part of the first leg disengages the medical device.